



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/337,330	06/21/1999	JUHA MATTI PIRKOLA	017.37288X00	8862

20985 7590 07/31/2002

FISH & RICHARDSON, PC  
4350 LA JOLLA VILLAGE DRIVE  
SUITE 500  
SAN DIEGO, CA 92122

EXAMINER

GELIN, JEAN ALLAND

ART UNIT

PAPER NUMBER

2681

DATE MAILED: 07/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/337,330

Applicant(s)

PIRKOLA ET AL.

Examiner

Jean A Gelin

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 01 June 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-6, 9-12, 19, 20, 22-25 and 29-35 is/are rejected.
- 7) ☐ Claim(s) 7, 8 and 13-18, 21, 26-28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase " providing a packet-switched telephony network address of the visited function in the as updated subscriber location information and the subscriber identification" is not clear. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-3, 5, 6, 9, 10, 12, 19, 20, 22, 23, 25, and 29-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Ahopelto et al. (US Pat. No. 5,970,059).

Regarding claims 1, 6, Ahopelto teaches a method of allowing packet-switched telephony subscriber to roam within a packet switched telephony network (i.e. permitting the roaming of mobile station in networks, e.g. GPRS, of different operators and the routing of data packets, col. 3, lines 20-57) comprising: sending a message from a subscriber terminal to a visited function (i.e. GPRS SN) in a packet switched telephony network, the message including a subscriber identification for the subscriber (i.e. corresponding to: when the mobile station moves from one station to another station, it register with base station in its area, col. 5, lines 60-65); the visited function (i.e. GPRS SN) sending a message to the subscriber's packet-switched telephony network home function (i.e. GPRS HSN) providing a packet-switched telephony network address of the visited function in the as updated subscriber location information and the subscriber identification (i.e. corresponding to: the new GPRS SN inherently sends information to the GPRS HSN for updating purpose (col. 5, line 60 to col. 6, line 6); the GPRS HSN storing the network address of the visited function as location information for the subscriber (col. 5, lines 60-65).

Regarding claim 2, Ahopelto teaches receiving a call that is directed to the subscriber (i.e., corresponding to a packet sends to mobile station, col. 7, lines 11-20); obtaining the location information for the subscriber from the subscriber's Packet switched telephony network Home Function including the network address of the visited function (i.e. inherently present in checking the GPRS HSN for address, col. 7, lines 43-

Art Unit: 2681

65); routing the call to the subscriber terminal by establishing a packet-switched telephony call towards the network address of the serving visited function (i.e. GPRS HSN sends the encapsulated data packet forward to GPRS SN, col. 7, line 61 to col. 8, line 9).

Regarding claims 3, 9, 22, Ahopelto teaches forwarding the call from the serving visited function to a subscriber terminal (i.e. GPRS HSN sends the encapsulated data packet forward to GPRS SN, col. 7, line 61 to col. 8, line 9).

Regarding claim 5, Ahopelto teaches the network address of the serving visited function comprises an Internet Protocol (IP) address (col. 9, lines 1-10).

Regarding claims 10, 23, Ahopelto teaches forwarding the call from the visited function to the called subscriber includes the step of forwarding the call as a packet switched telephony call to the called subscriber (col. 7, line 61 to col. 8, line 9).

Regarding claims 12, 25, Ahopelto teaches the GPRS SN (i.e., visited function) is provided on the called subscriber terminal (col. 7, lines 43-65).

Regarding claim 19, Ahopelto teaches a method of call delivery within a mobile Packet-switched telephony network comprising: receiving a local call at a gateway function (GPRS GSN), the call including a subscriber identification of the called subscriber (i.e. receiving data packet containing address of the mobile, col. 7, lines 19-26); the gateway function (GPRS GSN) obtaining from the subscriber's packet-switched telephony home function subscriber location information for the called subscriber, the subscriber location information including an address of a visited function corresponding to the subscriber identification (col. 7, lines 26-65); and establishing a packet-switched

telephony call from the gateway function towards the address of the visited function (col. 7, lines 26-65, col. 9, lines 1-22).

Regarding claim 20, Ahopelto teaches sending an address request message including the called subscriber's subscriber identification from the gateway function to the called subscriber's home function in the packet-switched telephony network (i.e. inherently present in message sent from toe gateway contains the address of the mobile station); the home function identifying subscriber location information including an address of a visited function corresponding to the subscriber identification (col. 7 lines 16-65); and receiving a message at the gateway function from the subscriber's home function including the address of the visited function corresponding to the subscriber identification (col. 7, line 43 to col. 8, line 9).

Regarding claim 29, Ahopelto teaches packet-switched telephony network that supports mobility comprising: a home function (GPRS HSN) including a home function database storing current location information and a subscriber profile for one or more subscribers (i.e. within its internal database, col. 43-65); and one or more visited functions (fig. 1, GPRS SN), each visited function serving an area of the packet switched telephony network each visited function providing the visited function address to the home function in response to receiving a subscriber registration request, the home function storing the address of the visited function as updated subscriber location information (col. 5, line 35 to col. 6, line 28).

Art Unit: 2681

Regarding claim 30, Ahopelto teaches a subscriber terminal coupled to a visited function, the subscriber terminal providing a update location message including a subscriber identification to the visited function (col. 5, lines 55-65).

Regarding claim 31, Ahopelto teaches a subscriber terminal is coupled to the visited function via a wireline link (i.e. laptop computer is connected directly to the network).

Regarding claims 32, 33, Ahopelto teaches a subscriber terminal is coupled to the visited function via a wireless link (mobile station 3).

Regarding claim 34, Ahopelto teaches a subscriber terminal is coupled to the visited function via a packet switched network (see fig. 1).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahopelto et al. (US Pat. No. 5,970,059) in view of Alexander Jr. et al. (US Pat. No. 5,870,589).

Regarding claim 4, Ahopelto teaches all the limitations above except the packet-switched telephony network address of the serving visited function comprises an Asynchronous Transfer Mode (ATM) address.

However, the preceding limitation is very well known in the art of communication as evidenced by Alexander. Alexander teaches the use of ATM protocol address to

Art Unit: 2681

securely send packet data to correct destination (col. 8, lines 29-67). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the techniques of Alexander within the system Ahopelto in order to provide fast packet switching and support multiple concurrent connections over a single communications lines.

7. Claims 11, 24, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahopelto et al. (US Pat. No. 5,970,059) in view of Kelly (US Pat. No. 6,347,085).

Regarding claims 11, 24, and 35, Ahopelto teaches all the limitations above except the steps of translating the packet-switched telephony call received at the visited function to a format used by the subscriber terminal that is incompatible with packet-switched telephony; forwarding the translated call from the visited function to the called subscriber terminal.

However, the preceding limitations are very well known in the art of communications, as evidenced by Kelly. Kelly teaches a gateway apparatus for connecting a circuit switched communication network to a packet switched data network comprises a processor for packetizing logic configured to translate data from the circuit switched communication network into a format suitable for transmission over the packet-switched data network to a terminal (col. 4, lines 55-66). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the techniques of Kelly within the system Ahopelto in order to enable



Art Unit: 2681

translation of a conventional telephone number from a client task on an IP-based network into a network protocol address representing a gateway.

***Allowable Subject Matter***

8. Claims 7-8, 13-18, 21, 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is an examiner's statement of reasons for allowance: the prior art teaches the HLR (i.e. home function) provides the VLR (i.e. visited function) information about the caller or the calling entity prior to establish communication.

However, the home function communicating with the visited function to determine that the called subscriber can receive the call prior to providing the visited function address to the calling entity, as recited in claim 7, has not disclosed, taught, or made obvious over the prior art of record.

Claims 8, 21 include limitation that render claim 7 allowable. Therefore, the claims are allowed for the same reason recited above.

As per claims 13-18 and 26-28, the Applicant teaches the steps of: sending call control signaling between the calling entity and the visited function to set up the packet-switched telephony call; and sending the media of the packet-switched telephony call directly from the calling entity to the visited function. These limitations, in conjunction with all limitations of the independent claim, have not been disclosed, taught, or made obvious over the prior art of record.

Art Unit: 2681

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Voit teaches Internet phone to PSTN cellular/PCS system.

Chuah teaches method for admitting new connections based on measured quantities in a multiple access system for communications network.

Jones teaches voice over Internet protocol telephone system and method.

Hjelm teaches allocation of channels for packet data services.

Ludwig teaches location dependent WWW service in digital cellular communication networks.

Wiedeman teaches wireless telephone satellite roaming system.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A Gelin whose telephone number is (703) 305-4847. The examiner can normally be reached on 9:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (703) 305-4778. The fax phone numbers


Art Unit: 2681

for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

J. Gelin  
July 27, 2002

J.G

  
NAY MAUNG  
PRIMARY EXAMINER